Super Fast Recovery Diode

RF505B6S

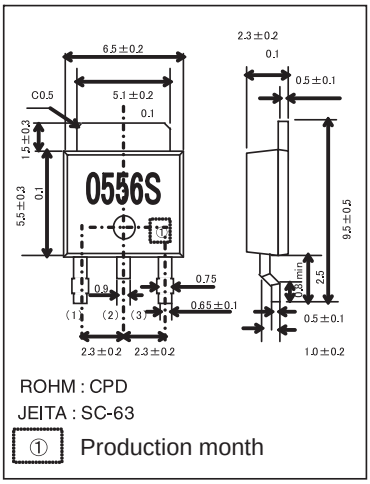
●Series
Standard Fast Recovery

●Applications
General rectification

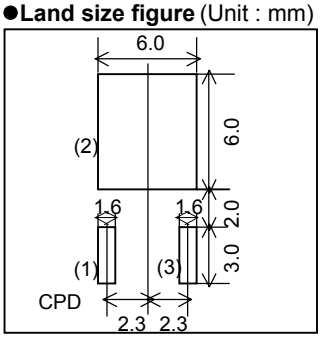
●Features
1)Power mold type. (CPD)
2)High switching speed
3)Low Reverse current

●Construction
Silicon epitaxial planar

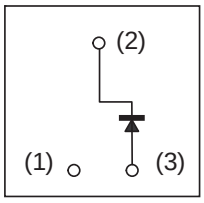
●Dimensions (Unit : mm)



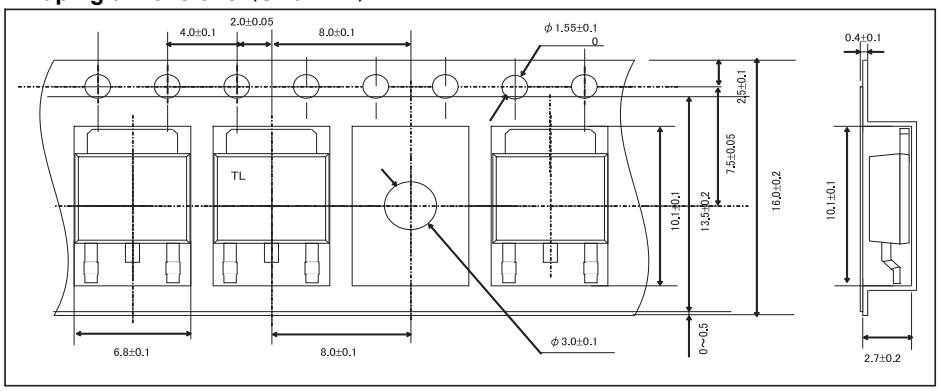
●Land size figure (Unit : mm)



●Structure



●Taping dimensions (Unit : mm)



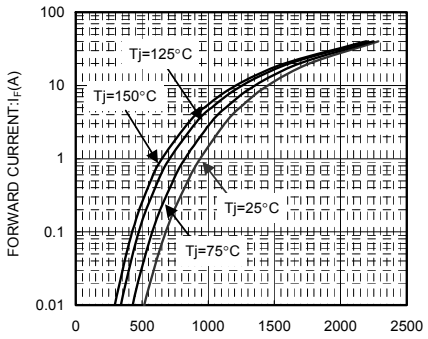
●Absolute maximum ratings (Tc=25°C)

Parameter	Symbol	Conditions	Limits	Unit
Repetitive peak Reverse voltage	V_{RM}	Duty≤0.5	600	V
Reverse voltage	V_R	Direct voltage	600	V
Average rectified forward current	Io	60Hz half sin wave,resistive load Tc=42°C	5	A
Forward current surge peak	I_{FSM}	60Hz half sin wave, Non-repetitive one cycle peak value, Tj=25°C	50	A
Junction temperature	Tj		150	°C
Storage temperature	Tstg		−55 to +150	°C

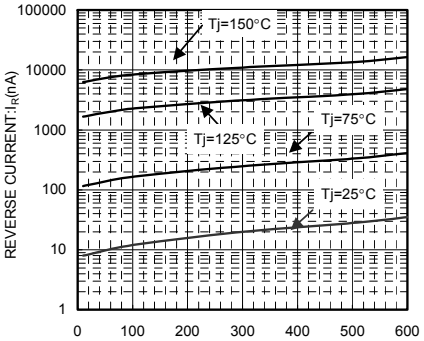
●Electrical characteristics(Tj=25°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V_F	I_F=5.0A	-	1.3	1.7	V
Reverse current	I_R	V_R=600V	-	0.05	10	μA
Reverse recovery time	trr	I_F=0.5A,I_R=1A,Irr=0.25×I_R	-	22	30	ns
Thermal resistance	Rth(j-l)	junction to lead	-	—	12	°C/W

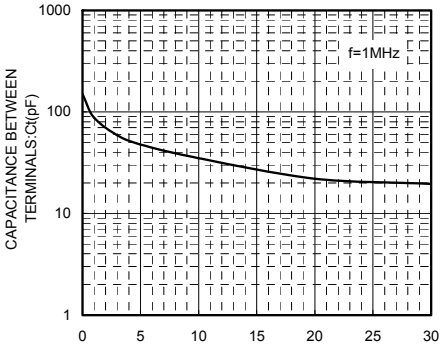
●Electrical characteristic curves



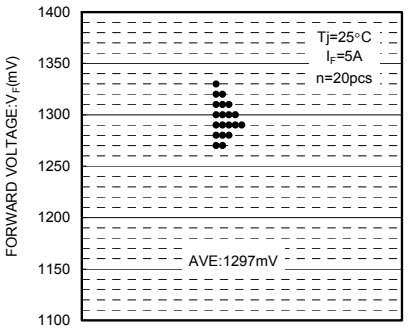
V_F-I_F CHARACTERISTICS



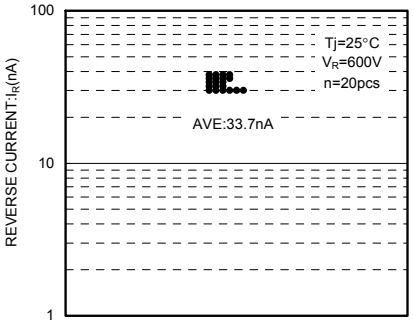
V_R-I_R CHARACTERISTICS



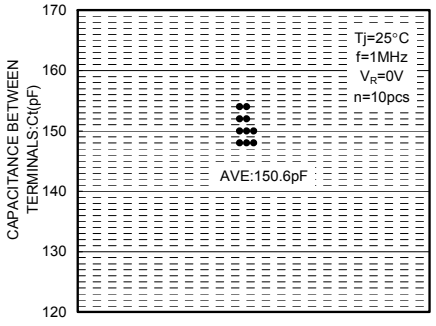
V_R-Ct CHARACTERISTICS



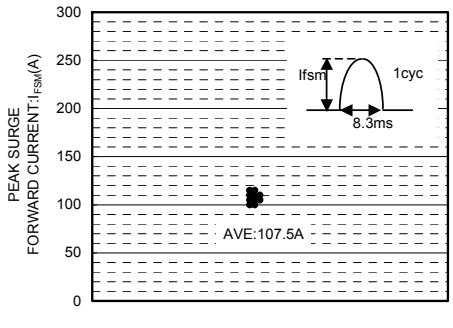
V_F DISPERSION MAP



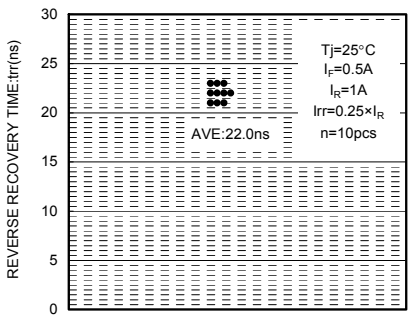
I_R DISPERSION MAP



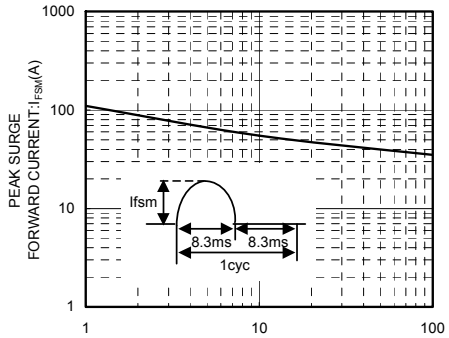
Ct DISPERSION MAP



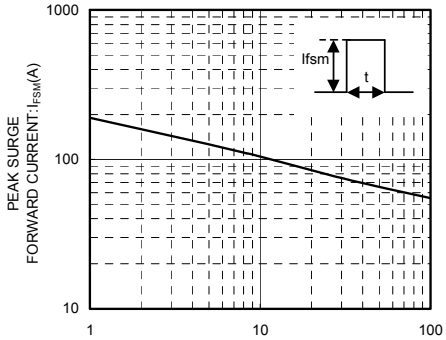
I_{FSM} DISRESION MAP



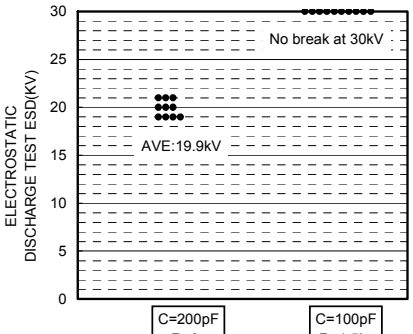
trr DISPERSION MAP



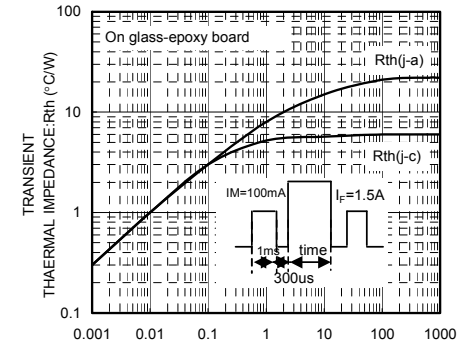
I_{FSM}-CYCLE CHARACTERISTICS



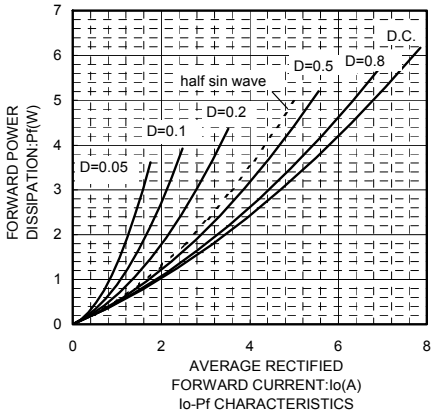
I_{FSM}-t CHARACTERISTICS

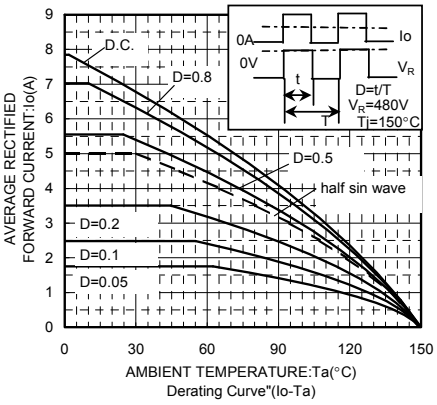


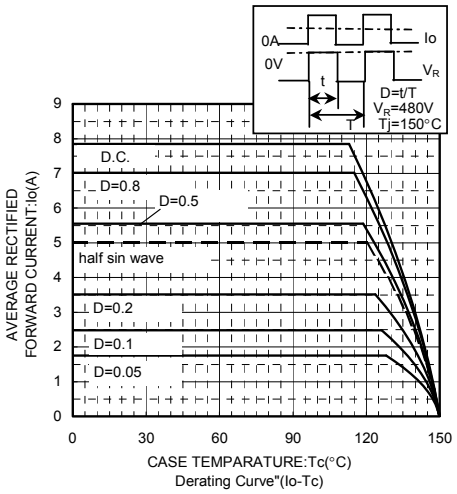
ESD DISPERSION MAP



Rth-t CHARACTERISTICS







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